TABLE 9-1

ESTIMATED INFILTRATION FOR DIFFERENT CAP DESIGNS

INPUT ASSUMPTIONS

Parameter	Value	Units
Trench area (areas 7 [partial], 8, 9)	132,022	ft^2
Drainage area (not including trench area)	501,227	ft^2
Runoff outside of trenches	10	in
Infiltration into open trenches	45	in
Direct Infiltration into trenches	495,083	ft^3
Runoff into trenches	417,689	ft^3
Total volume of water into trenches	912,772	ft^3

RESULTS

Cap Type	Average Annual Infiltration through Cap		Percent Reduction from Current [a]	HELP Run (Appendix G)
	(inches)	(ft^3)	(ft^3)	
Trench backfill only, k = 10^{-2} cm/sec	38.12	419,390	54%	0A-SOIL
18-inch soil cap, k = 10^{-3} cm/sec	36.19	398,156	56%	1A-SOIL
18-inch soil cap, k = 10^{-4} cm/sec	35.76	393,426	57%	1B-SOIL
18-inch soil cap, k = 10^{-5} cm/sec	31.84	350,298	62%	1D-SOIL
24-inch clay cap, k = 10^{-6} cm/sec	9.91	109,028	88%	2A-CLAY
FML cap	4.31	47,418	95%	3D-FML
FML/GCL cap	0.003	33	> 99%	4A-FML-GCL

[a] Includes reduction due to stormwater redirection